

ADDENDUM TO FACT SHEET
Permit No. ST-7420
Olympic Pipe Line Company (OPLC)
February 18, 2004

This is an addendum to the fact sheet accompanying the State Waste Discharge Permit No. ST-7420, which was issued to Olympic Pipe Line on June 20, 2000. The following revisions are proposed to be made to the permit as requested by the Permittee on April 23, 2003.

As approved by the Department in the early spring of 2003, OPLC has been conducting a bioremediation pilot test consisting of the addition of a sulfate solution to an approved infiltration gallery to enhance biodegradation of petroleum-contaminants within the plume. Data from the test indicate positive results with respect to degradation of contaminants. OPLC is requesting authorization to proceed with full scale in-situ remediation. OPLC is already conducting and will continue with pump and treat groundwater remediation. At the present time, the treated water is discharged to the sanitary sewer system.

The Department proposes to approve OPLC's request for proceeding with a full scale in-situ remediation based on the following reasons:

- 1) OPLC will meet a sulfate target level of 200 mg/L at monitoring wells located within the plume;
- 2) The water used to make up the sulfate solution will be the treated water from the plume. The pump and treat operation will continue;
- 3) OPLC will be required to monitor the sulfate concentration, and at no time will the sulfate concentration exceed the ground water standard outside the edge of the plume;
- 4) The remediation plan is expected to result in net environmental and economic benefits.

The Department proposes the following conditions to be added to the permit which will address the in-situ operation:

S1.A. Bioremediation By Injection to Subsurface (Outfall 001)

Beginning on February 16, 2004, and lasting through the expiration date of this permit, the Permittee is authorized to conduct bioremediation with the addition of sulfate solution to subsurface through an existing infiltration gallery located within the plume area, subject to the following limitations:

LIMITATIONS	
Parameter	Maximum Daily
Application rate	1,000 gpd
Sulfate ^a (into subsurface)	500 mg/L sulfate
Sulfate (within plume area)	Not to exceed 250 mg/L
Total Dissolved Solids (groundwater)	500 mg/L
^a The water source for the disodium sulfate solution shall be the treated groundwater extracted from the plume. Other sources of water may be used to make up the injected solution provided that the Permittee obtains written approval from the Department.	

S2. MONITORING REQUIREMENT

A. Groundwater Monitoring

Parameter	Units	Sample Points	Sampling Frequency	Sample Type
Sulfate ^b	mg/L	MW-1, 6, 8, 17, and RW-4	monthly	grab
TPH-G	mg/L	MW-1, 6, 8, 17, and RW-4	monthly ^a	grab
BTEX (report separately)	µg/L	MW-1, 6, 8, 17, and RW-4	monthly ^a	grab
Total Dissolved Solids	mg/L	MW-1,6,8,17 and RW-4	monthly ^a	grab
^a The monitoring frequency may be reduced to quarterly if three consecutive results indicated sulfate concentration has reached equilibrium below the limit of 200 mg/L.				
^b Should sulfate concentrations measured exceed the sulfate target level of 200 mg/L, the Permittee shall immediately sample monitoring wells MW-2, 9, 18, and Seep 1C for sulfate on a monthly basis. Samples do not need to be collected at Seep 1C if there is not sufficient flow to collect the sample. The Permittee shall manage the injection of sulfate solution in such a manner as to maintain a sulfate concentration of no greater than 250 mg/L at the monitoring wells at the edge of the plume.				

PUBLIC NOTICES

The proposed changes above require a notice to be published: 1) to satisfy the requirements of 40 CFR 122.62 regarding the issuance of public notice for major permit modifications, and 2) to satisfy the requirements of WAC-173-200-030(2)(c) related to anti-degradation policy, which requires the Permittee to seek for a finding of overriding public interest on the proposed application of sulfate solution to subsurface for in-situ bioremediation. The draft permit modification will be published for a 30 day public review and comment period in the Bellingham Herald, to fulfill the above requirements. The final modification is contingent upon the outcome of the public review and comment period.

Attached site maps.